

In the Specification:

Please amend the second full paragraph of page 8 to the following:

It should be readily apparent that the ratio of reference signal 122 to 124 need not be constant, i.e. $\text{signal } 124 = \text{constant}(\text{signal } 124)$ is not a requirement. The ratio could be set by any given function or a look up table stored in a memory of the controller. For example, the value of the signal 124 could be set as a function of the signal 122.

$$\text{Example 1: Signal } 124 = \frac{\text{Signal } 122}{\text{Signal } 122 + \text{Constant}}$$

$$\text{Example 2 : Signal } 124 = \frac{10}{(\text{Signal } 122)^2}$$

Example 3 : Signal 124 = constant , ~~signal 122~~ signal 122 < threshold

Signal 124 = signal 124 (second constant), signal 122 >= threshold

Please amend the last paragraph of page 2 that continues to page 3 to the following:

In an alternate embodiment of the invention, if the speed of the conveyor falls below a threshold value, the brush roll speed is maintained at a minimum speed regardless of conveyor speed. As an illustration, it has been found that for certain brushes if brush speed drops below a threshold, cleaning efficiency suffers. In this embodiment, if the conveyor speed falls below 10 feet per minute, the brush speed is maintained at 300 ~~rpm~~ rpm. Above that conveyor speed, a linear relation between brush and conveyor speed is maintained until a maximum of 30 feet per minute and 644 rpm is achieved.

Please amend the second full paragraph of page 2 to the following:

It has been found that for certain brushes if brush speed drops below a threshold, cleaning efficiency suffers. Therefore in an alternate embodiment, if the conveyor speed falls below 10 feet per minute, the brush speed is maintained at 300 ~~rpm~~ rpm. Above that conveyor speed, a linear relation between brush and conveyor speed is maintained until a maximum of 30 feet per minute and 644 rpm is achieved.